

## ABSTRACT OF THE DISCLOSURE

5 A developer cartridge which is rotatably mounted  
in the developing unit of an image forming apparatus,  
and supplies a developer to the developing unit while  
10 rotating includes a cylindrical cartridge main body  
having a developer outlet hole in the outer surface  
near one end, and a ring-like cartridge-side shutter  
which is fitted on the outer surface near one end of  
the cylindrical cartridge main body to be movable along  
15 the rotating shaft of the cylindrical cartridge main  
body between a position where the developer outlet hole  
is opened and a position where the developer outlet  
hole is closed. The developing unit has a guide for  
inserting the developer cartridge and a driving unit  
20 for rotating the developer cartridge, and the guide has  
a main body-side shutter with a hole. When the  
developer cartridge is mounted, the cartridge-side  
shutter moves from the position where the developer  
outlet hole is closed to the position where the  
25 developer outlet hole is opened, and the developer  
outlet hole aligns itself with the hole of the main  
body-side shutter. The cylindrical cartridge main body  
and the main body-side shutter integrally rotate to  
align the developer outlet hole and the hole of the  
main body-side shutter with a developer replenishment  
port formed below the main body-side shutter. Every  
time this happens, the developer in the developer

cartridge is supplied from the developer replenishment port to the developing unit via the developer outlet hole and the hole of the main body-side shutter.

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2